BURST-MODE DIGITAL TRANSMITTER

Abstract of the Disclosure

A transmitter (305) for transmitting reverse optical signals in a broadband communications system (300) that includes a converter (320) for digitizing the analog RF signals and a carrier-detect circuit (330) coupled to the converter (320) for detecting when digital RF signals are present at the output of the converter (320). When the carrier-detect circuit (330) detects digital RF signals, the carrier-detect circuit (330) allows the digital RF signals to be transmitted upstream through the broadband communications system (300). A digital network (310) then combines the received digital RF signals with other digital RF signals from additional transmitters (305). The combined digital signals are then provided to a receiver (315) that includes a converter (335) for returning the digital RF signals to analog RF signals and then providing the analog signals to a headend for further processing.